



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,994	06/11/2004	Sam Shiaw-Shiang Jiang	5413-0182PUS1	3993
64044	7590	10/30/2007	EXAMINER	
BIRCH, STEWART, KOLASCH & BIRCH, LLP			HAILU, KIBROM T	
8110 GATEHOUSE ROAD			ART UNIT	PAPER NUMBER
SUITE 100 EAST			2616	
FALLS CHURCH, VA 22315				
MAIL DATE		DELIVERY MODE		
10/30/2007		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/709,994	<b>Applicant(s)</b> JIANG, SAM SHIAW-SHIANG
	<b>Examiner</b> Kibrom T. Hailu	<b>Art Unit</b> 2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## • Status

1)  Responsive to communication(s) filed on 21 September 2007.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 7 is/are pending in the application.

4a) Of the above claim(s) 1-6 and 8-18 is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 7 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 11 June 2004 is/are: a)  accepted or b)  objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All    b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
.4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5)  Notice of Informal Patent Application  
6)  Other: \_\_\_\_\_.  
\_\_\_\_\_

## DETAILED ACTION

1. A new ground of rejection is presented to the previously objected limitations of claim 7.

Therefore, this Office Action is Non-Final rejection.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yi et al. (US 6,771,603 B2) in view of "3<sup>rd</sup> Generation Partnership Project; Technical Specification Group Radio Access Network; Radio Link Control (RLC) protocol Specification (Release 3)", 2003/06, pp: 2-77, 3GPP TS 25.322 V4.9.0, 3GPP Organizational Partners.

Yi discloses a method for controlling a transmitter and a receiver in a wireless communication system to handle a transmission window size change procedure (Abstract) comprising following steps: (a) driving the receiver to deliver a control message having a window size parameter to the transmitter for adjusting a transmission window size of the

transmitter (col. 2, lines 10-11, 60-64; col. 3, lines 11-14, 57-60; col. 4, lines 30-32); and (b) when the transmitter receives the control message, driving the transmitter to output an acknowledgement message to the receiver and adjust the transmission window size according to the window size parameter (col. 2, line 64-col. 3, line 2, when the window size number (WSN) or control message transmits from the receiving system to the originating system, the originating system resets the transmission window size same as the WSN or window parameter that is transmitted from the receiving system; and the originating system also generates and start transmitting the corresponding number of PDUs to the receiver. In other words, the originating system resets its transmission window and acknowledges that it received the WSN or control message by transmitting the corresponding PDUs. The number of the PDUs is the equal to the desired window parameter sent from the receiver. Note also that sending acknowledgment either from the receiver and/or transmitter is not a novel thing. It is obvious for a person skill in the art).

Yi doesn't explicitly disclose driving the receiver to check a value of the window size acknowledgement parameter carried by the acknowledgement message for determining if the acknowledgement message corresponds to the control message, and driving the receiver to discard the acknowledgement message from the transmitter if the window size acknowledgement parameter carried by the acknowledgement message does not match the window size parameter carried by the control message.

3GPP TS 25.322 V4.9.0, 3GPP Organizational Partners driving the receiver to check a value of the window size acknowledgement parameter carried by the acknowledgement message for determining if the acknowledgement message corresponds to the control message, and

driving the receiver to discard the acknowledgement message from the transmitter if the window size acknowledgement parameter carried by the acknowledgement message does not match the window size parameter carried by the control message (page 74, section 11.6.6.3, explains the initial sender or the receiver checks the SN\_ACK (same as WSN\_ACK) field or parameter within the MRW\_ACK SUFI (WINDOW\_ACK SUFI) whether it is equal to the initially transmitted SN value included in the MRW SUFI. If the SN\_ACK is less than or greater than initially transmitted value of the window size SN, the SN\_ACK is discarded. The SN\_ACK value or parameter is also discarded when the timer is not active (expired or out of dated)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the window size acknowledgement field discarding technique based on the comparison with the initially transmitted widow size field or parameter as taught by 3GPP TS 25.322 V4.9.0, 3GPP Organizational Partners into the controlling data flow method of Yi in order to avoid dropping packets due to unequally adjusted window sizes between the receiver and the transmitter, and avoid window size value that is intended for different set of data, and avoid waiting for too long for the window size acknowledgement field or value in response to initially proposed and transmitted window size value.

### *Conclusion*

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kibrom T. Hailu whose telephone number is (571)270-1209. The examiner can normally be reached on Monday-Thursday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kfh  
10/26/07

CHIRAG G. SHAH  
PRIMARY PATENT EXAMINER  
  
PRIMARY PATENT EXAMINER